



POLISH FOR THE MAINS VOLTAGE

What do you mean – the power for your system still comes out of the socket just like that? Without any measures to prevent sound-damaging noise from entering the system? Well, it's time for an upgrade like this one.

POWER



AUDES

Regular readers will remember that the ST-900 is not the first power conditioner from the Estonian manufacturer Audes that we have presented here. A little over a year ago, we had a giant named ST-3000 as a guest, which did the job of power cleaning very convincingly and was able to transfer energy floods of a full three kilovolt amperes of electrical power to the system - if the system wanted it and the in-house power grid was up to the task.

ST-3000 – 3000 VA load capacity; ST-900 – I'm sure you'll be able to easily crack this triad, even if you're a math hater. And so it's not surprising that the ST-900 weighs only eleven kilograms instead of its big brother's 33. The difference is also noticeable in the price: The smaller model costs EUR 2,400, the larger one EUR 4,000. Before we delve deeper into the matter, let's clarify: How much power handling do you need for a „decent“ hi-fi system? This

*Pretty display instruments,
but with limited usefulness in
the case of the voltmeter*





The fittings used are of good quality

depends first and foremost on the power amplification you have in your home. The least problematic candidates in this respect are solid-state amplifiers in class AB operation with low quiescent current or switching amplifiers. What both have in common is the fact that their current consumption is dependent on the output power currently being demanded. Generally speaking, I would say that even with a powerful integrated amplifier, you will never get the ST-900 anywhere near its capacity limits. The situation is somewhat different if you use Class A amplifiers or tube amps in A mode. Such devices consume a lot of current despite low output power and do so virtually constantly. Tubes even more,

because the energy for heating is added. And that's nothing for the ST-900? Yes, it is. For example, if I use the excellent Air Tight chain from this issue plus an external tube phono preamplifier plus turntable, the power consumption is a practically constant 720 VA. This is undoubtedly not a very ecological approach to music playback, but it does not put the ST-900 in any distress. The unit might be too weak if you're running elaborate active multi-way systems with many power amplifiers. Or a home theater system with a lot of speakers. The „small“ Audez power cleaner is housed in a meticulously built cabinet of hi-fi standard dimensions, the most striking innovation being the two round pointer

Teammates

Turntable:

- Clearaudio Master Innovation
- Yamaha GT 750

Pickup Cartridges:

- Skyanalog G1
- Sculpture A.4

Transformer:

- Air Tight ATH-2 Reference
- Sculpture A Mini Nano

Tonearms:

- Clearaudio Universal
- Clearaudio Unify 14“

Phono preamplifier:

- Air Tight ATC5
- DIY

Preamplifier:

- ATC-5

Power amplifier:

- ATM-2211

Loudspeaker:

- DIY MiniOnken / Klughorn / Focal / JBL

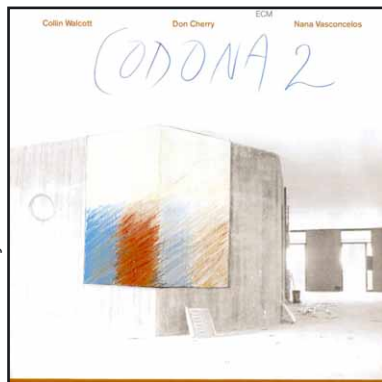
Competitors

Power conditioner:

- PS Audio Power Plant P10

Five sockets are certainly not abundant, but you can redistribute externally





What we played

Walcott / Cherry / Vasconcelos

Codona 2

Inga Rumpf

Universe Of Dreams

Elder

Omens

Glasgow Coma Scale

Direns

instruments on the front that indicate the applied mains voltage and the flowing current. The current meter, specified with five amperes, fits perfectly. Still, you have to make concessions with the voltmeter: With the 250-volt instrument, the vital reading range is reduced to a few millimeters of scale width. Apart from that, the instruments are lovely retro displays in a stylish Bakelite case, which at least visually enhances the device noticeably.

The back of the ST-900 has what you would expect from a device of this type: a power plug as the mains input, a power switch, and five sockets that provide the filtered output voltage. As with the larger model (which had six outlets), I would have liked a few more sockets, but this can be remedied with an additional power strip. The hardware used is impeccable, and the power switch will probably only be pressed once when the device is put into operation. The filter's power consumption is so low that it's not worth switching off when it's not in use. A look under the

matte black lacquered thick-walled MDF lid – the loudspeaker manufacturer Audes clearly shows through here – reveals a richly dimensioned toroidal transformer as the only „active“ component. I dare to say that the power rating of 900 VA is conservative; elsewhere, such a caliber is also gladly titled with 1500 VA. Great, that inspires confidence. The ST-900 does not have a switch-on current brake, and I was a bit worried whether my mains fuse would handle the switch-on of the device without complaint. It does, although it's only a 16 amp category „B“ automatic, i.e., with medium cut-off characteristics.

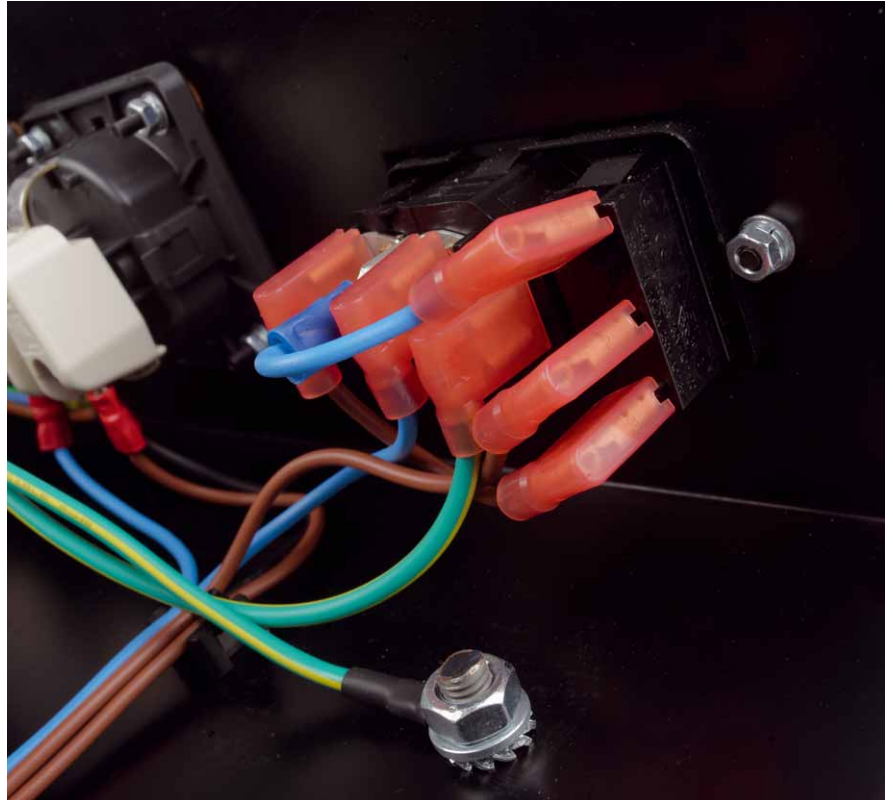
Noise is always a potential issue with such large transformers, but the Audes transformer remains within limits in this respect. In other words, it is not entirely noise-free, but you have to be relatively close to hear the mechanical hum.

Now, what can such a device do, and what not? If you constantly have problems with the level of your mains voltage, the Audes transformer cannot cope with it. For that, you would need an electronic solution that elaborately rebuilds the output voltage and possibly even draws the corresponding energy from a battery. There is, as a regular reader, you know that, but you don't necessarily have to go that high. A device like the Audes is very well able to compensate for short-term fluctuations in the network. The large transformer is an effective energy storage device that can provide a substantial boost when needed - but only for a short time. In addition, it has a filter effect due to its principle. The type used here is an effective hurdle for frequencies above 800 Hertz; the vast majority of network

*The housing of the ST-900
is essentially made of MDF*

disturbances are in the frequency range considerably above this. Even significantly below the mains frequency of 50 Hertz, the transformer hardly transmits anything, which helps to substantially reduce the harmful influences of, for example, light dimmers. Another extra: The device balances the output voltage around the ground conductor so that you no longer need to worry about the polarity of the mains plug in the socket.

There is no need to fear dynamic compromises when using such a device; quite the opposite: The transformer still supplies energy even when the socket in the wall is weakening due to substantial pulse currents. Even with luxury setups like the one with the mentioned Air Tight chain, switching on the ST-900 is immediately audible: The rendition gains in size, detail resolution, and vitality, and the system seems to have even more desire to play. Well audible, for example, on the lively ECM masterpiece „Codona 2“, a colorful firework of various percussive instruments and Don Cherry’s unmistakable trumpet. The latter peels out noticeably more clearly from the action when the ST-900 feeds the system. Nana Vasconcelo’s multifaceted percussion shines brighter, making the album



VDE-compliant wiring; at least the housing base is connected to the protective earth conductor



With the two pointer instruments, the Audes mains filter visually passes as a power amplifier as well

more engaging. Let's try Inga Rumpf's accomplished birthday album, „Universe Of Dreams,“ which is a bit more pop-produced than the ECM classic. But also here, the Audes power conditioner makes itself positively noticeable: The voice comes more clearly into the foreground, and the percussion sounds crisper, simply more appropriate.

After that, I did some experiments with critical phono setups that were quite difficult to get to work with little interference: Low output voltage cartridges, followed by high gain transformers with tube phono pre-amps. When only the turntable and phono preamp ran through the Audes, various problems were solved abruptly. I would no longer want to operate a system without such a solution; the sound gains and practical advantages are simply too significant.

Holger Barske



Inside the ST-900, you can see the toroidal transformer. The device is now also available in a version with a built-in DC filter

Audes ST-900



- Price
- Distribution
- Phone
- Internet
- Warranty
- Dimensions (W x H x D)
- Weight

2,400 Euro
TCG GmbH, Nordhorn
+49 5921 7884927
tcg-gmbh.de
2 years
477 x 121 x 347 mm
approx. 10.7 kg



» If there is such a thing as a sensible investment when it comes to hi-fi, then it is one in this unit. The Audes isolating transformer improves the sound's dynamics, enhances detail, and solves annoying mains interference problems.